REMARKS

Claims 1-4 remain in the application. Only claim 1 is in independent form.

The Office Action requested that the specification be read for the correction of all Trademarks. Accordingly, changes have been made to comply with the request.

Claims 1-6 are rejected under 35 U.S.C. § 112, first and second paragraph as the claims are found indefinite.

A claim is not indefinite when the limitations recited in the claim are definite (In re Fisher (CCPA 1970) 427 F2D 833, 166 USPQ 18)). All that is necessary is that the terms can be identified (Benger Labs, Ltd. v. R.K. Laros Co. et al., (D.C. Penn. 1962) 209 Fsupp 639, 135 USPQ 11; In re Bridgeford (CCPA 1966) 357 F2d 679, 149 USPQ 55; Locklin et al. v. Switzer Bros., Inc. (CA 9 1961) 299 F2d 160, 131 USPQ 294, cert denied 369 US 861).

The glycoprotein is distinctly and uniquely identified by the claim. The glycoprotein is a nonconventional L-selectin ligand (SILL). In addition to not being recognized by anti-CD34-specific and MECA-79 antibodies, it in uniquely identified by being sulfation-independent. Sulfation-independence specifically identifies the

ligand of the present invention since all other L-selectin ligands are sulfation-dependent (see United States Patent 5,489,578). This combination of characterizations provides a unique and specific identifier. Further, the term L-selectin ligand is a term of art and is described on pages 4-6 of the application. Reconsideration of the rejection is respectfully requested.

Claims 1-4 stand objected to under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one of skill in the art to which it pertains or with which it is most nearly connected to make and/or use the invention.

Applicant respectfully traverses the objection. As stated above, Applicant has provided a unique combination of characterizations which provide a unique identifier and methods by which these characterizations can be made thereby providing an enabling disclosure (see page 17, line 22 through page 19, line 14). The Office Action notes that the lack of binding of the characterizing antibodies "may merely reflect differences in epitopes ... of known L-selectin ligands in different tissue or cell types." However, MECA-79 binds to the sulfation dependant epitope and is therefore an anti-functional antibody. The lack of binding of MECA-79 therefore correlates with the sulfation independence of the nonconventional L-selectin ligand of the present invention.

The Office Action also notes that the L-selectin ligand could simply be a known L-selectin ligand that is expressed in a cell specific manner on the KG1a cell line and reflects KG1a cells. Applicant has shown that the nonconvention L-selectin ligand of the present invention is expressed on normal hematopoietic cells. This data has been published in two abstracts (Blood, Nov 1996 and Exp. Hematology Aug. 1996) and presented at Keystone Meeting in Feb. 1996.

Additionally, Applicant has defined the metes and bounds of the functional analogs in the specification at pages 15, line 23, through page 17, line 21.

The Office Action has cited applicant's 1997 paper which states that the structure of the L-selectin ligand of the present invention (SILL) is under investigation. The material that applicant chooses to make public in a reference prior to the issuance of the patent cannot be used to limit and/or interpret the information in the non-public patent application.

The combination of the characterizations set forth in the claims provide a unique and indefinite identifier of the nonconventional L-selectin ligand of the present invention. The ligand is <u>not</u> recognized by the anti-CD34-specific and MECA-79 antibodies, and is sulfation-independent as well as resistant to O-sialoglycoprotein endopeptidase activity and found on hematopoietic cells. There is therefore sufficient support in the specification for the presently pending claims and reconsideration of the rejection is respectfully requested.

Claims 1-4 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to provide an enabling disclosure specifically with regard to the MECA 79 antibody and its availability . The MECA-79 antibody is available. Applicant at page 50 provides information on the availability of the antibody.

MECA-79 antibody. MECA-79 antibody was a gift from Dr. Phillip Streeter, Searle Research Laboratories/Monsanto Co., St. Louis, MO). A MECA-79 hybridoma is available from American Type Culture Collection (ATCC), 12301 Parklawn Drive, Rockville, MD 20852 as accession number HB-9479. The production of the MECA-79 hybridoma is described in United States Patent No. 5,403,919.

Applicant has amended claim 1 to recite the ATCC accession number, thereby, rendering the present rejection moot. Reconsideration of the rejection is respectfully requested.

Claims 1-4 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite, specifically in the recitation of "KG1a cell line". The Office Action also states that the "KG1a" cell line is required to practice the claimed invention. However, as the KG1a cell line is readily obtainable by the repeatable method set forth in the specification, therefore deposit of the cell line is not required. Reconsideration of the rejection is respectfully requested.

Claims 1-4 are rejected under 35 U.S.C. § 102(a) as being anticipated by the Sackstein et al, 1994. Alternatively, claims 1-4 are rejected under 35 U.S.C.

§ 103 as being obvious over the Sackstein et al, 1994. This application is a continuation application of a continuation-in-part application of U.S.S.N. 08/321,400, filed October 11, 1994. As the parent Application specifically sets forth the claimed invention, there is sufficient support in the parent Application for the presently pending independent claims. Therefore, the cited reference is not prior art, as a matter of law, as it was published within one year of the filing date of the parent application. Reconsideration of the rejection is respectfully requested.

The remaining dependent claims not specifically discussed herein are ultimately dependent upon the independent claims. The references as applied against these dependent claims do not make up for the deficiencies of those references as discussed above, as the prior art references do not disclose the characterizing features of the independent claims discussed above. Hence, it is respectfully submitted that all of the pending claims are patentable over the prior art.

In view of the present amendment and foregoing remarks, reconsideration of the rejections and advancement of the case to issue are respectfully requested.

The Commissioner is authorized to charge any fee or credit any overpayment in connection with this communication to our Deposit Account No. 11-1449.

Respectfully submitted,

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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service and is addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on May 7, 2001.

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